EXHIBIT W

EXHIBIT 19

Entropic Communications, LLC v. Comcast Corporation, et al.
Case 2:23-cv-01050-JWH-KES (C.D. Cal.)

U.S. Patent No. 11,785,275 Exemplary Infringement Chart

Comcast operates and maintains a nationwide television and data network through which it sells, leases, and offers for sale products and services, including the Technicolor TC8717 cable modem, Technicolor CGM4140 cable modem, Technicolor CGM4331 cable modem, and products that operate in a similar manner ("Accused Cable Modem Products"), as well as the Arris AX013ANC STB, Arris AX013ANM STB, Arris AX014ANC STB, Arris AX014ANM STB, Arris MX011ANC STB, Arris MX011ANM STB, Pace PX013ANC STB, Pace PX013ANM STB, Pace PX022ANC STB, Pace PX022ANM STB, Samsung SX022ANC STB, Samsung SX022ANM STB, and products that operate in a similar manner ("Accused Set Top Products"). Comcast provides cable television and internet services ("Accused Services") via the lease, sale, and/or distribution of the Accused Cable Modem Products and/or the Accused Set Top Products. Comcast literally and/or under the doctrine of equivalents infringes the claims of the '206 Patent by making, using, selling, offering for sale, and/or importing the Accused Services, Accused Cable Modem Products, and/or the Accused Set Top Products.

As shown below in the chart with exemplary support, the Accused Services and/or the Accused Set Top Products infringe at least claims 1, 2, 5, 7, 8, 10-12, 15, 17, 18, and 20 of U.S. Patent No. 11,785,275 ("'275 Patent"). The '275 Patent was filed September 30, 2022, issued October 10, 2023, and is entitled "System and Method for Receiving a Television Signal." The '275 Patent claims priority to U.S. Patent Application No. 17/862,946, filed on Jul. 12, 2022; U.S. Patent Application No. 17/587,462, filed on Jan. 28, 2022; U.S. Patent Application No. 17/217,244, filed on Mar. 30, 2021; U.S. Patent Application No. 16/430,506, filed on Jun. 4, 2019; U.S. Patent Application No. 15/792,318, filed Oct. 24, 2017; U.S. Patent Application No. 14/948,881, filed Nov. 23, 2015; U.S. Patent Application No. 14/617,973, filed on Feb. 10, 2015; U.S. Patent Application No. 13/962,871, filed on Aug. 8, 2013; U.S. Patent Application Serial No. 12/762,900 filed on Apr. 19, 2010; and U.S. Provisional Patent Application No. 61/170,526 filed Apr. 17, 2009.

The Accused Services infringe the claims of the '275 Patent, as described below, either directly under 35 U.S.C. § 271(a), or indirectly under 35 U.S.C. §§ 271(b)–(c).

#	U.S. Patent No. 11,785,275	Accused Services and/or Accused Set Top Products
1pre	A method for operating a television receiver, comprising:	The Accused Services perform the claimed method utilizing, for example, the Accused Set Top Products, which include at least one set top box ("STB") located at each subscriber location, including, for example, the Arris AX013ANC STB, Arris AX013ANM STB, Arris AX014ANC STB, Arris AX014ANM STB, Arris MX011ANC STB, Arris MX011ANM STB, Pace PX013ANC STB, Pace PX013ANM STB, Pace PX022ANC STB, Pace PX022ANM STB, Samsung SX022ANC STB, Samsung SX022ANM STB, and products that operate in a similar manner. By way of example, the Arris AX013ANM is charted herein. As described below, the Arris AX013ANM has a Broadcom BCM33843 SoC. On informed belief, the Arris AX013ANM is representative of all Accused Set Top Products, including those having BCM3383, BCM3384, BCM33843, or BCM3390 SoCs.
1a	receiving, by an input terminal, an input signal comprising broadcast channels, the broadcast channels comprising a plurality of desired channels and a plurality of undesired channels, wherein the plurality of desired channels are non-contiguous;	The Accused Services receive, by an input terminal, an input signal comprising broadcast channels, the broadcast channels comprising a plurality of desired channels and a plurality of undesired channels, wherein the plurality of desired channels are non-contiguous as described below. Specifically, the Accused Set Top Products include an input terminal that receives an input signal from the cable plant. For example, as shown below, the Arris AX013ANM includes a RF input, highlighted in blue, that is connected to a coaxial cable. This coaxial cable carries the input signal received via the cable plant. On informed belief, the input signal includes one or more television channels and one or more data channels, together constituting broadcast channels. On informed belief, the plurality of desired channels are located in non-contiguous portions of the input signal.

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		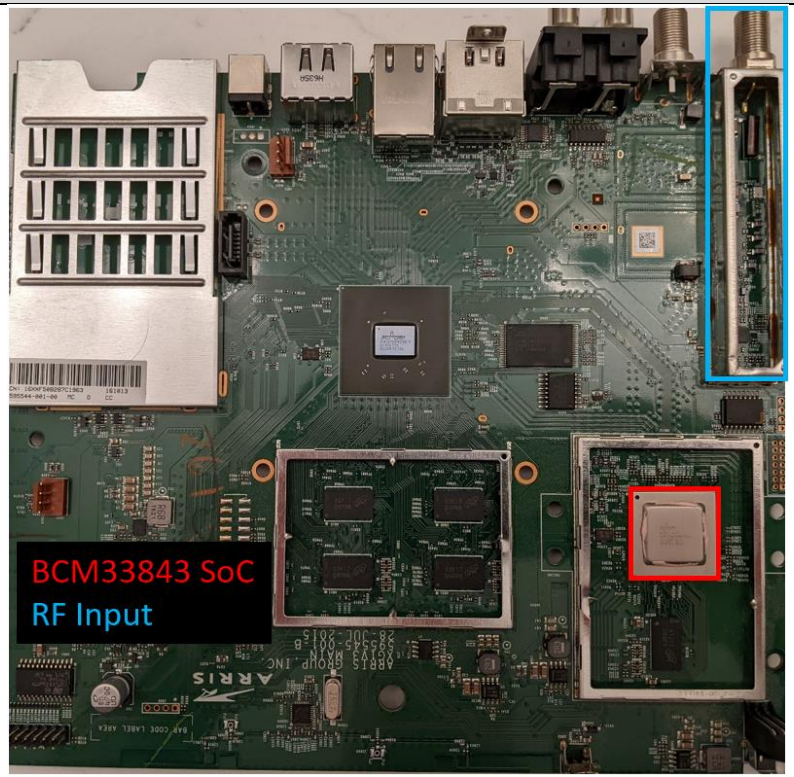 "Broadcom's BCM3384 DOCSIS®/EuroDOCSIS™ 3.0 cable gateway SoC combines Broadcom's Full-Band Capture (FBC) digital tuning technology with remote diagnostics, dual-band concurrent Wi-Fi, a dedicated applications processor and integrated DECT 6.0 CAT-iq 2.0." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002036) "Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere."

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		(ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
1b	processing, by a radio front end coupled to the input terminal, the input signal to generate a processed input signal;	The Accused Services process, by a radio front end coupled to the input terminal, the input signal to generate a processed input signal as described below. Specifically, the Accused Set Top Products include applicable circuity and/or software modules that processes the input signal. For example, the Arris AX013ANM includes a Broadcom BCM33843 SoC, highlighted in red below. The applicable circuity and/or software modules of the Accused Set Top Products include a radio front end that processes the input signal, highlighted in orange below.

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		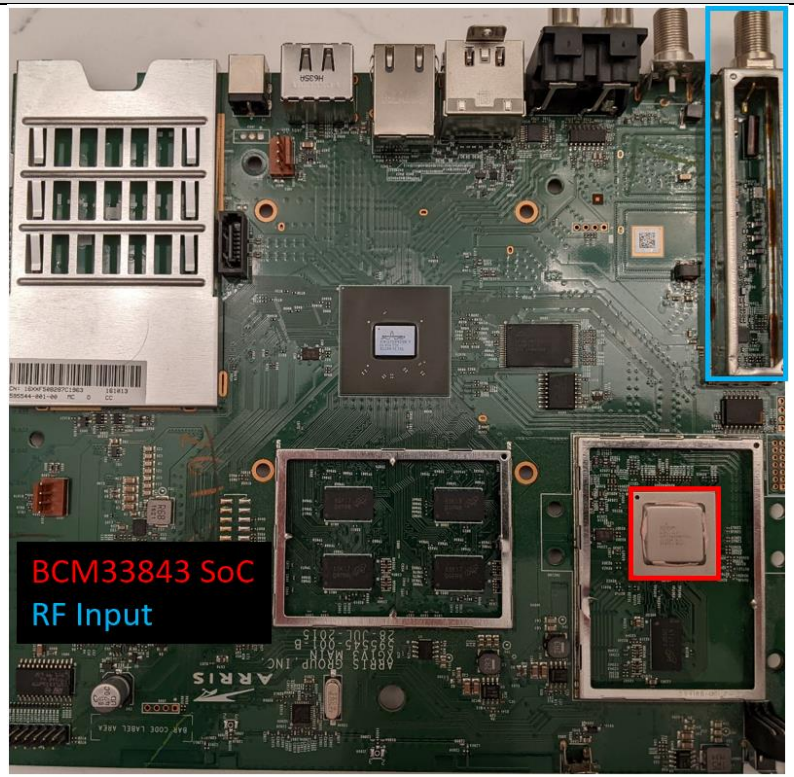 "Broadcom's BCM3384 DOCSIS®/EuroDOCSIS™ 3.0 cable gateway SoC combines Broadcom's Full-Band Capture (FBC) digital tuning technology with remote diagnostics, dual-band concurrent Wi-Fi, a dedicated applications processor and integrated DECT 6.0 CAT-iq 2.0." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002036)

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		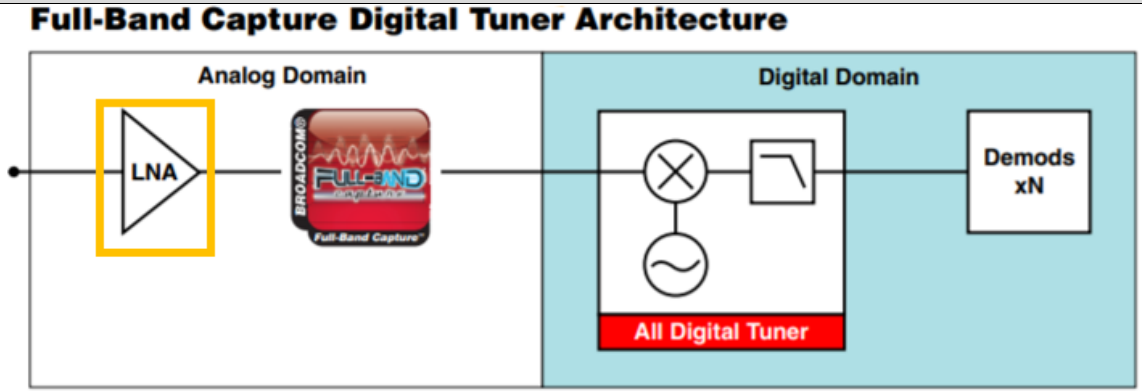 (ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031, annotated) Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
1c	digitizing, by an analog-to-digital converter (ADC) coupled to the radio front end, the processed input signal to generate a digitized signal;	The Accused Services digitize, by an analog-to-digital converter (ADC) coupled to the radio front end, the processed input signal to generate a digitized signal as described below. Specifically, the Accused Set Top Products include applicable circuitry and/or software modules constituting an ADC that digitizes the input signal. For example, the Arris AX013ANM includes applicable circuitry and/or software modules constituting a full-band capture ADC, highlighted in red below, that is coupled to the radio front end and digitizes the processed input signal. "Broadcom's BCM3384 DOCSIS®/EuroDOCSIS™ 3.0 cable gateway SoC combines Broadcom's Full-Band Capture (FBC) digital tuning technology with remote diagnostics, dual-band concurrent Wi-Fi, a dedicated applications processor and integrated DECT 6.0 CAT-iq 2.0."

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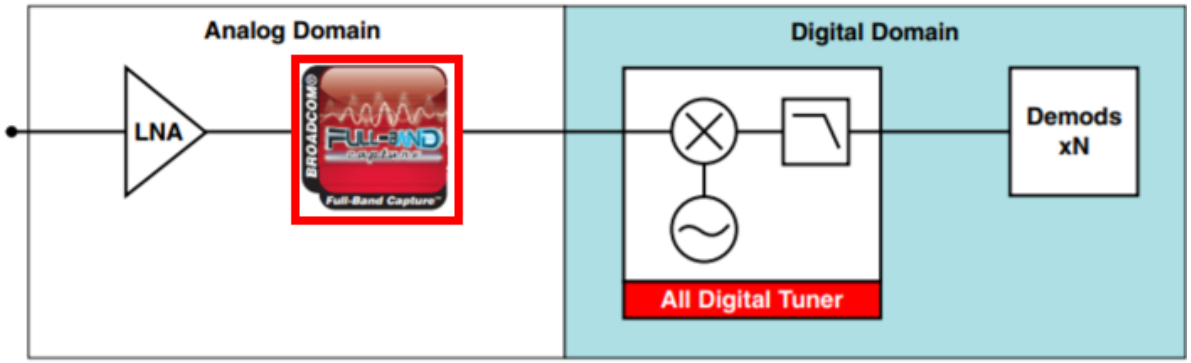
		(ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002036) "Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) **Full-Band Capture Digital Tuner Architecture**  (ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031, annotated) Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement

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		the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
1d	selecting, by a digital frontend (DFE) coupled to the ADC, the plurality of desired channels from the digitized signal; and	The Accused Services select, by a digital frontend (DFE) coupled to the ADC, the plurality of desired channels from the digitized signal as described below. Specifically, the Accused Set Top Products include applicable circuitry and/or software modules constituting a digital front end operable to select the plurality of desired channels from the digitized signal. For example, the Arris AX013ANM includes applicable circuitry and/or software modules constituting a digital tuner, highlighted in green below, that is coupled to the ADC and selects the desired channels from the digitized signal. "Broadcom's BCM3384 DOCSIS®/EuroDOCSIS™ 3.0 cable gateway SoC combines Broadcom's Full-Band Capture (FBC) digital tuning technology with remote diagnostics, dual-band concurrent Wi-Fi, a dedicated applications processor and integrated DECT 6.0 CAT-iq 2.0." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002036) "Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)

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		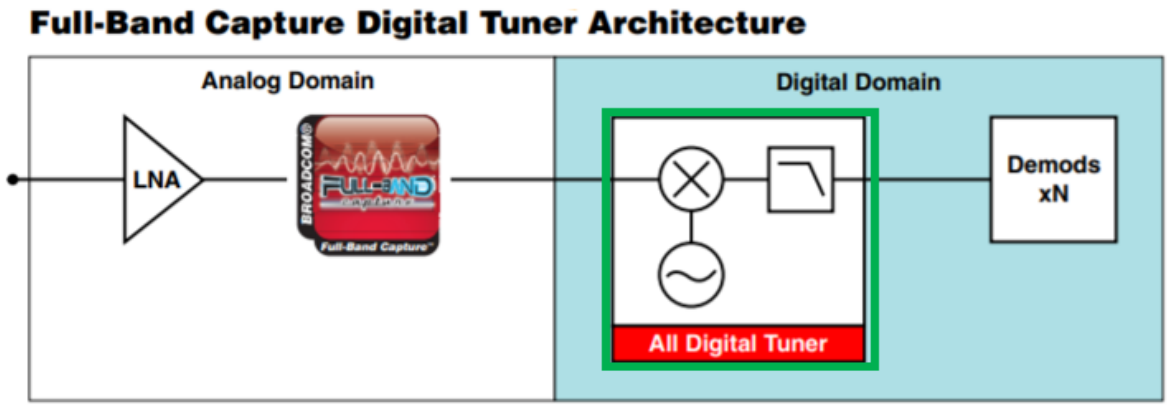 (ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031, annotated) Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
1e	outputting, by the DFE, the selected plurality of desired channels to at least one demodulator as a digital datastream,	The Accused Services output, by the DFE, the selected plurality of desired channels to at least one demodulator as a digital datastream as described below. Specifically, the Accused Set Top Products include applicable circuitry and/or software modules that output the desired channels from the digital front end to at least one demodulator. For example, the Arris AX013ANM includes applicable circuitry and/or software modules constituting at least one demodulator, highlighted in purple below, that is coupled to the digital tuner. The digital tuner outputs the desired channels to the demodulators for processing. As both the digital tuner and the demodulators are in the digital domain, the output to the demodulators is a digital datastream.

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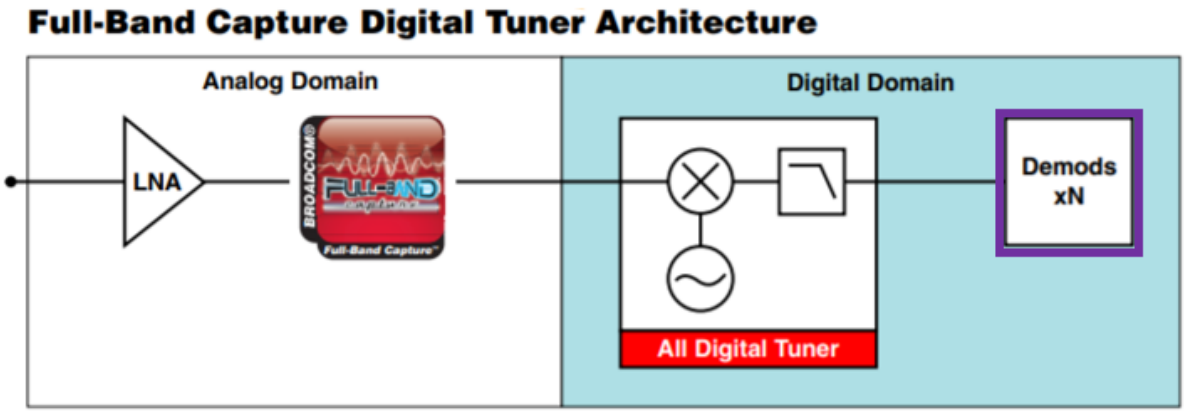
		"Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)  (ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031, annotated) Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.

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1f	wherein the demodulator extracts information encoded in the digital datastream.	The demodulator extracts information encoded in the digital datastream as described below. Specifically, the demodulators include applicable circuitry and/or software modules that output the desired channels from the digital tuner to at least one demodulator. For example, the Arris AX013ANM includes applicable circuitry and/or software modules constituting the demodulators to extract information, such as television programming, encoded in the digital datastream. "Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
2	The method of claim 1, wherein the DFE outputs the digital datastream via a serial interface.	The DFE outputs the digital datastream via a serial interface as described below. Specifically, the Accused Set Top Products include applicable circuitry and/or software modules constituting a DFE that outputs a digital datastream. *See* 1e. On informed belief, this digital datastream is provided via a serial interface.

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		Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
5	The method of claim 1, wherein the extracted information is stored for use in a digital video recorder (DVR).	The extracted information is stored for use in a digital video recorder (DVR) as described below. Specifically, the Accused Set Top Products are DVRs. For example, the Arris AX013ANM is a DVR. "Storage Capacity: Currently, your X1 DVR can record approximately 150 total hours of HD programming on the hard drive." (ENTROPIC_COMCAST_002961 at ENTROPIC_COMCAST_002963) Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
7	The method of claim 1, wherein the plurality of desired channels comprises at least one television channel.	The plurality of desired channels comprises at least one television channel as described below. Specifically, the Accused Set Top Products are used to watch and/or record television programming. This includes a user selecting one or more desired television channels to watch and/or record.

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		"Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Storage Capacity: Currently, your X1 DVR can record approximately 150 total hours of HD programming on the hard drive." (ENTROPIC_COMCAST_002961 at ENTROPIC_COMCAST_002963)
8	The method of claim 1, wherein the plurality of undesired channels comprises at least one television channel.	The plurality of undesired channels comprises at least one television channel as described below. Specifically, the Accused Set Top Products are used to watch and/or record television programming. This includes a user selecting one or more desired television channels to watch and/or record. The other television channels provided by Comcast that the user does not select constitute the plurality of undesired channels. "Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating

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		limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Storage Capacity: Currently, your X1 DVR can record approximately 150 total hours of HD programming on the hard drive." (ENTROPIC_COMCAST_002961 at ENTROPIC_COMCAST_002963)
10	The method of claim 1, wherein the broadcast channels comprise cable broadcast channels.	The broadcast channels comprise cable broadcast channels as described below. Specifically, Comcast is a cable provider and the Accused Services include providing cable broadcast channels. "Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Storage Capacity: Currently, your X1 DVR can record approximately 150 total hours of HD programming on the hard drive." (ENTROPIC_COMCAST_002961 at ENTROPIC_COMCAST_002963)

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11pre	A television receiver device, comprising:	The Accused Services are provided using at least one set top box ("STB") located at each subscriber location, for example, the Accused Set Top Products including the Arris AX013ANC STB, Arris AX013ANM STB, Arris AX014ANC STB, Arris AX014ANM STB, Arris MX011ANC STB, Arris MX011ANM STB, Pace PX013ANC STB, Pace PX013ANM STB, Pace PX022ANC STB, Pace PX022ANM STB, Samsung SX022ANC STB, Samsung SX022ANM STB, and products that operate in a similar manner. As shown below, the Accused Set Top Products constitute a television receiver device. By way of example, the Arris AX013ANM is charted herein. As described below, the Arris AX013ANM has a Broadcom BCM33843 SoC. On informed belief, the Arris AX013ANM is representative of all Accused Set Top Products, including those having BCM3383, BCM3384, BCM33843, or BCM3390 SoCs.
11a	an input terminal operable to receive an input signal comprising broadcast channels, the broadcast channels comprising a plurality of desired channels and a plurality of undesired channels, wherein the plurality of desired channels are non-contiguous;	The Accused Set Top Products include an input terminal operable to receive an input signal comprising broadcast channels, the broadcast channels comprising a plurality of desired channels and a plurality of undesired channels, wherein the plurality of desired channels are non-contiguous as described below. Specifically, the Accused Set Top Products include an input terminal that receives an input signal from the cable plant. For example, as shown below, the Arris AX013ANM includes a RF terminal, highlighted in blue, that is connected to a coaxial cable. This coaxial cable carries the input signal received via the cable plant. On informed belief, the input signal includes one or more television channels and one or more data channels, together constituting broadcast channels. On informed belief, the plurality of desired channels are located in non-contiguous portions of the input signal.

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		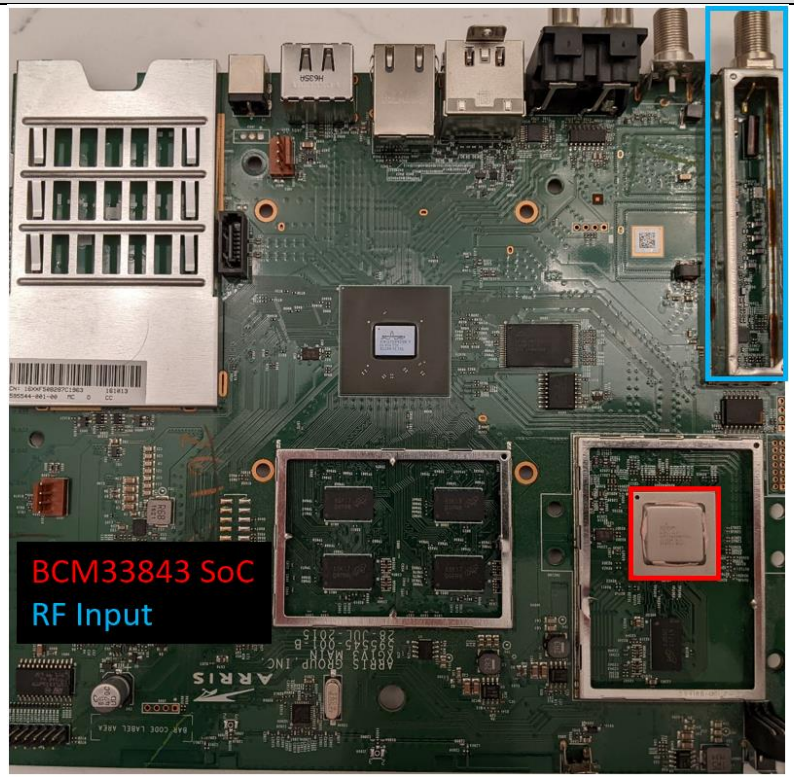 "Broadcom's BCM3384 DOCSIS®/EuroDOCSIS™ 3.0 cable gateway SoC combines Broadcom's Full-Band Capture (FBC) digital tuning technology with remote diagnostics, dual-band concurrent Wi-Fi, a dedicated applications processor and integrated DECT 6.0 CAT-iq 2.0." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002036) "Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere."

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11b	a radio front end, coupled to the input terminal, operable to process the input signal;	The Accused Set Top Products include a radio front end, coupled to the input terminal, operable to process the input signal as described below. Specifically, the Accused Set Top Products include applicable circuity and/or software modules constituting a radio front end coupled to the input terminal. For example, the Arris AX013ANM includes a Broadcom BCM33843 SoC, highlighted in red below. The applicable circuity and/or software modules include a radio front end that processes the input signal, highlighted in orange below.

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		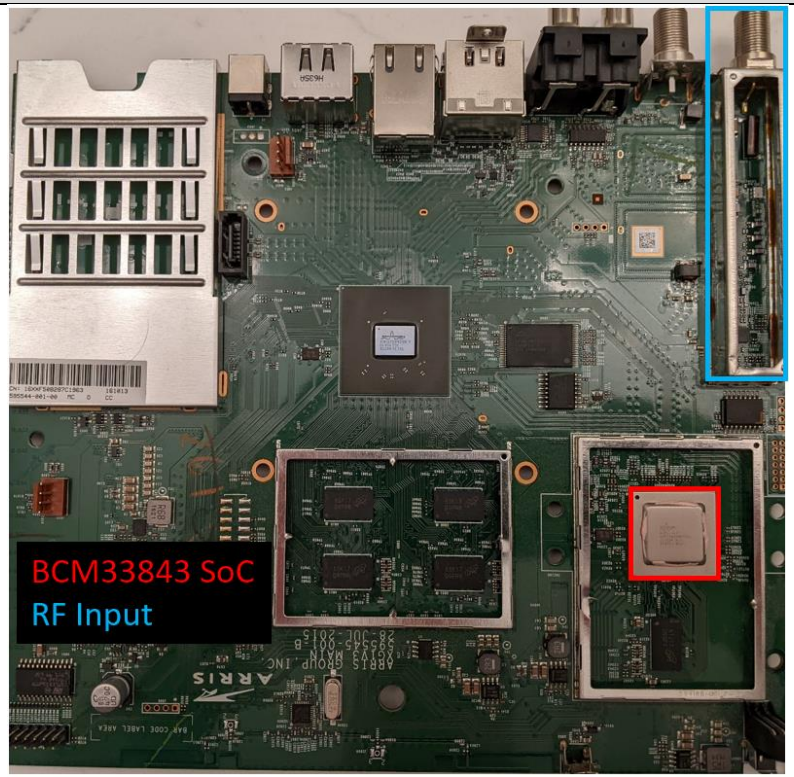 "Broadcom's BCM3384 DOCSIS®/EuroDOCSIS™ 3.0 cable gateway SoC combines Broadcom's Full-Band Capture (FBC) digital tuning technology with remote diagnostics, dual-band concurrent Wi-Fi, a dedicated applications processor and integrated DECT 6.0 CAT-iq 2.0." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002036)

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		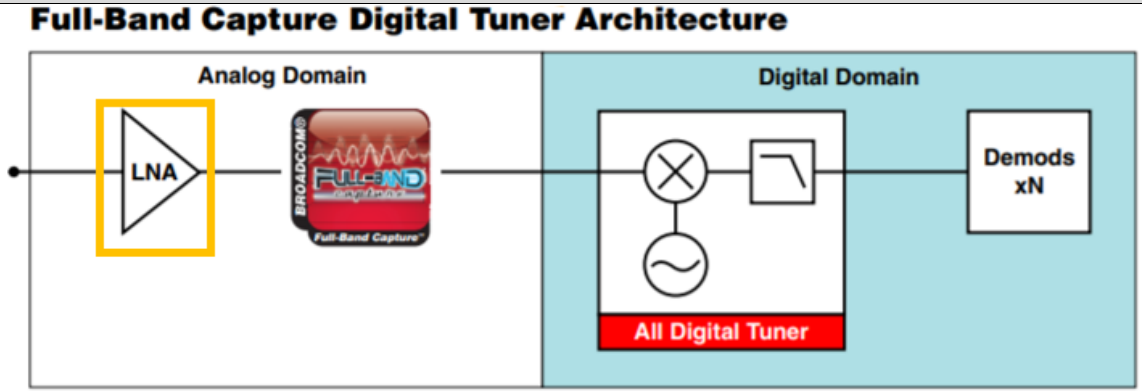 (ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031, annotated) Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
11c	an analog-to-digital converter (ADC), coupled to the radio front end, operable to digitize the processed input signal to generate a digitized signal; and	The Accused Set Top Products include an analog-to-digital converter (ADC), coupled to the radio front end, operable to digitize the processed input signal to generate a digitized signal as described below. Specifically, the Accused Set Top Products include applicable circuitry and/or software modules constituting an ADC that digitizes the input signal. For example, the Arris AX013ANM includes applicable circuitry and/or software modules constituting a full-band capture ADC, highlighted in red below, that is coupled to the radio front end and digitizes the processed input signal.

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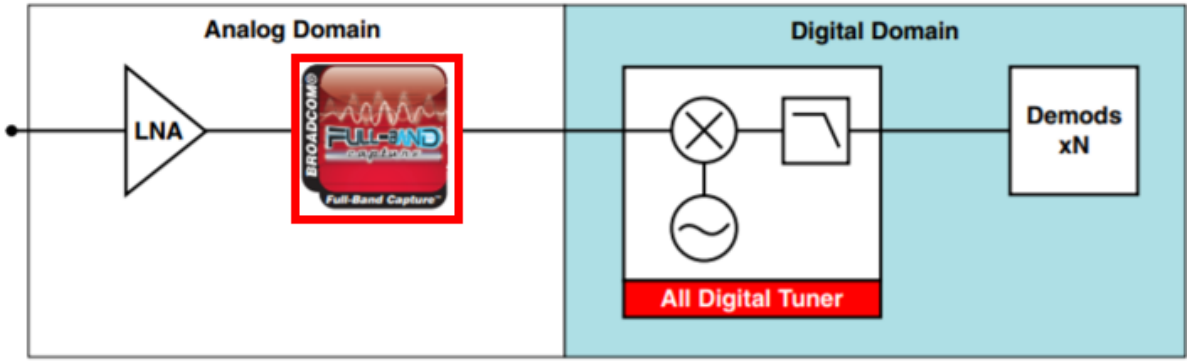
		"Broadcom's BCM3384 DOCSIS®/EuroDOCSIS™ 3.0 cable gateway SoC combines Broadcom's Full-Band Capture (FBC) digital tuning technology with remote diagnostics, dual-band concurrent Wi-Fi, a dedicated applications processor and integrated DECT 6.0 CAT-iq 2.0." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002036) "Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002036) "Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002036) **Full-Band Capture Digital Tuner Architecture**  (ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031, annotated)

#	U.S. Patent No. 11,785,275	Accused Services and/or Accused Set Top Products
		Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
11d	a digital frontend (DFE), coupled to the ADC, operable to select the plurality of desired channels from the digitized signal and output the selected plurality of desired channels to at least one demodulator as a digital datastream,	The Accused Set Top Products include a digital frontend (DFE), coupled to the ADC, operable to select the plurality of desired channels from the digitized signal and output the selected plurality of desired channels to at least one demodulator as a digital datastream as described below. Specifically, the Accused Set Top Products include applicable circuitry and/or software modules constituting a digital front end operable to select the plurality of desired channels from the digitized signal. For example, the Arris AX013ANM includes applicable circuitry and/or software modules constituting a digital tuner, highlighted in green below, that is coupled to the ADC and selects the desired channels from the digitized signal. The selected channels are output to a demodulator, highlighted in purple below. As both the tuner and the demodulators are in the digital domain, the output from the tuner to the demodulators is a digital datastream. "Broadcom's BCM3384 DOCSIS®/EuroDOCSIS™ 3.0 cable gateway SoC combines Broadcom's Full-Band Capture (FBC) digital tuning technology with remote diagnostics, dual-band concurrent Wi-Fi, a dedicated applications processor and integrated DECT 6.0 CAT-iq 2.0." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002036) "Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating

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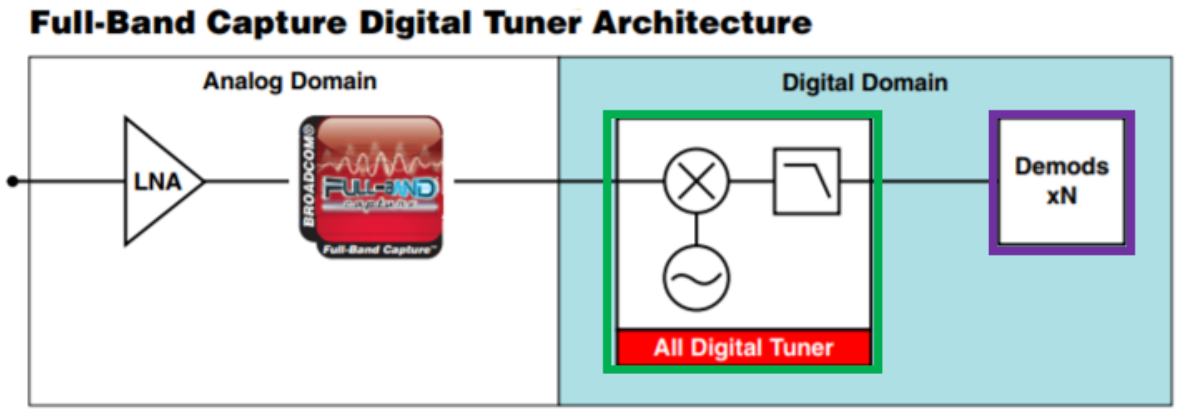
		limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)  (ENTROPIC_COMCAST_002029 at ENTROPIC_COMCAST_002031, annotated) Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
11e	wherein the demodulator is operable to extract information encoded in the digital datastream.	The demodulator is operable to extract information encoded in the digital datastream as described below. Specifically, the demodulators include applicable circuitry and/or software modules that output the desired channels from the digital tuner to at least one demodulator. For example, the Arris AX013ANM includes applicable circuitry and/or software modules constituting the demodulators to extract information, such as television programming, encoded in the digital datastream.

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		"Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Storage Capacity: Currently, your X1 DVR can record approximately 150 total hours of HD programming on the hard drive." (ENTROPIC_COMCAST_002961 at ENTROPIC_COMCAST_002963) Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
12	The television receiver device of claim 11, wherein the DFE is operable to output the digital datastream via a serial interface.	The DFE is operable to output the digital datastream via a serial interface as described below. Specifically, the Accused Set Top Products include applicable circuitry and/or software modules constituting a DFE that outputs a digital datastream. *See* 11d. On informed belief, this digital datastream is provided via a serial interface. Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement

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		the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
15	The television receiver device of claim 11, wherein the extracted information is stored for use in a digital video recorder (DVR).	The extracted information is stored for use in a digital video recorder (DVR) as described below. Specifically, the Accused Set Top Products are DVRs. For example, the Arris AX013ANM is a DVR. "Storage Capacity: Currently, your X1 DVR can record approximately 150 total hours of HD programming on the hard drive." (ENTROPIC_COMCAST_002961 at ENTROPIC_COMCAST_002963) Discovery will provide detailed information regarding implementation and identification of the specific components, source code, software and/or other instrumentalities used to implement the claimed system. As additional information is obtained through discovery related to the Accused Services and related instrumentalities, Entropic will supplement these contentions.
17	The television receiver device of claim 11, wherein the plurality of desired channels comprises at least one television channel.	The plurality of desired channels comprises at least one television channel as described below. Specifically, the Accused Set Top Products are used to watch and/or record television programming. This includes a user selecting one or more desired television channels to watch and/or record. "Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere."

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18	The television receiver device of claim 11, wherein the plurality of undesired channels comprises at least one television channel.	The plurality of undesired channels comprises at least one television channel as described below. Specifically, the Accused Set Top Products are used to watch and/or record television programming. This includes a user selecting one or more desired television channels to watch and/or record. The other television channels provided by Comcast that the user does not select constitute the plurality of undesired channels. "Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037)

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		"Storage Capacity: Currently, your X1 DVR can record approximately 150 total hours of HD programming on the hard drive." (ENTROPIC_COMCAST_002961 at ENTROPIC_COMCAST_002963)
20	The television receiver device of claim 11, wherein the broadcast channels comprise cable broadcast channels.	The broadcast channels comprise cable broadcast channels as described below. Specifically, Comcast is a cable provider and the Accused Services include providing cable broadcast channels. "Full-Band Capture digital tuning technology and remote diagnostics: Integrated on-chip technology directly samples and digitizes the entire 1GHz downstream spectrum of a cable plant, providing access to any channel anywhere." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Bandwidth flexibility: Supports DOCSIS and digital video on any frequency eliminating limitations of "block" tuners. When combined with Broadcom's set-top box SoC with fast acquisition technology, video channels can be pre-tuned." (ENTROPIC_COMCAST_002035 at ENTROPIC_COMCAST_002037) "Storage Capacity: Currently, your X1 DVR can record approximately 150 total hours of HD programming on the hard drive." (ENTROPIC_COMCAST_002961 at ENTROPIC_COMCAST_002963)